# INDEX TO VOLUME XXXVII, 1943


A

Air Currents within the Reflector Tube, *E. K. White*, 377.
Amateur Reflectors? How Many, 73.
Amateurs, A Map of the Lunar Crater *Conon* and Suggested Work for, *Frank Vaughn*, 393.
American Association of Variable Star Observers, Thirty-second Annual Meeting of the, *D. W. Rosebrugh*, 421.
American Astronomical Society, The, *Dean B. McLaughlin*, 416.
Angus, W. K., The Aurora Borealis as seen from Edmonton, 316.
Apgar, Charles E., Jupiter's Satellites I, II, III, IV, during 1944, 427.
Apparition of Jupiter, The 1940-41, *W. H. Haas and H. M. Johnson*, 357.
Asteroid Orbits, Kirkwood's Gaps in the, *John J. DelGrande and Sidney V. Soanes*, 187.
Astronomy, Recent Progress in, *Frank S. Hogg*, 81.
Atmosphere of Jupiter, The, *Ruth J. Northcott*, 52.
Aurora Borealis as seen from Edmonton, The, *W. K. Angus*, 316.
Aurora, "Swish" of the, 168, 254.

B

Barometer as a Point of Departure for the Natural Sciences, Telescope, Microscope and, *Louis C. Karpinski*, 401.
Barometer, Tercentenary of the Invention of the, 124.
Beals, C. S., On the Physical Origin of P Cygni-type Absorption Lines in the Spectrum of M.W.C. 374, 241.
Binary System H.D. 144208-9, The Composite, *R. M. Petrie*, 277.
Binding of Volumes of the Journal for Members, 168, 297.
Brydon, H. Boyd, Setting up and Adjusting the Equatorial Reflecting Telescope, 57, 153.

C

Campbell, J. W., The Wates Telescope and the University of Alberta Observatory, 265.
Chant, C. A., Isaac Newton: Born Three Hundred Years Ago, 1 (see also Notes and Queries and Reviews).
Chant Medal, The Third Annual Award of the, *H. R. Kingston*, 97.
Chant, Mrs. C. A. (obituary), 346.
Chemistry, Newton and, *Douglas McKie*, 17.
Cincinnati Observatory, Centenary of the, 381.
Comets and Meteors, *A. V. Madge*, 177.
Composite Binary System H.D. 144208-9, The, *R. M. Petrie*, 277.
Copernicus, Nicholas, Simon Newcomb on, 167.
Copernicus, Polish Astronomer, 1473-1543, *W. Carl Rufus*, 129.
Copernicus, The 400th Anniversary of the Death of, 74.
Crète, Florian, Les Rayons cosmiques with J-E. Guimont), 333.

D

David Dunlap Observatory, Communications from the, 339.
DelGrande, John J., Kirkwood's Gaps in the Asteroid Orbits (with Sidney V. Soanes), 187.
Desert Observations of Earth and Sky, 425.
Discovery of a Prehistoric Zodiac in England, The, *K. E. Maltwood*, 269.

E

Eclipse of February 19-20, 1943, Lunar, 126.
Evershed, M. A., Galileo, Newton, Halley: the Men Themselves, 47.
Examen d'un Miroir parabolique de 40 cm. d'Ouverture, *Paul H. Nadeau*, 237.

G

Galileo, Newton, Halley: The Men Themselves, *M. A. Evershed*, 47.
Garneau, De Lisle, The Ville Marie Observatory in 1942, 162.
Guimont, J.-E., Les Rayons cosmiques (with Florian Crète), 333.

H

H.D. 93075, The Orbits of the Spectroscopic Binary, *Ruth J. Northcott*, 339.

H.D. 144208-9, The Composite Binary System, *R. M. Petrie*, 277.

H.D. 203858, Spectrographic Orbital Elements and Relative Luminosities of the Components of, *C. G. Patten and A. McKellar*, 205.

Haas, W. H., Observations of Venus, 1938-42, and their Interpretation, (with H. M. Johnson) 146, 193; The 1940-41 Apparition of Jupiter, (with H. M. Johnson) 357.

Halley, Galileo, Newton: the Men Themselves, *M. A. Evershed*, 47.

Hoffleit, Dorrit (see Notes and Queries).

Hogg, Frank S., Recent Progress in Astronomy, 81 (see also Notes and Queries and Reviews).

J

Johnson, H. M., Observations of Venus, 1938-42, and their Interpretation, (with W. H. Haas), 146, 193; On Revolution and Rotation, 419; The Jovian Transit Observation Problem and an Instrumental Solution, 374; The 1940-41 Apparition of Jupiter, (with W. H. Haas), 357.

Jovian Transit Observation Problem and an Instrumental Solution, The, *H. M. Johnson*, 374.

Jupiter on January 13, 1944, The Occultation of, *R. M. Petrie and Jean K. McDonald*, 398.

Jupiter, The Atmosphere of, *Ruth J. Northcott*, 52.

Jupiter, The 1940-41 Apparition of, *W. H. Haas and H. M. Johnston*, 357.

Jupiter's Satellites I, II, III, IV during 1944, *Charles E. Apgar*, 427.

K

Kepler's Great Nova (1604), Nova Hercules (1934) and, 294.

Kingston, H. R., The Third Annual Award of the Chant Medal, 97.

Kirkwood's Gaps in the Asteroid Orbits, *John J. DelGrande and Sidney V. Soanes*, 187.

L

Lectures before the Society:

EDMONTON CENTRE — The Earth's Atmosphere, *G. W. Robertson*, 170; The Surface of the Moon, *C. G. Wates*, 171; Tercentenary of the Birth of Isaac Newton, *E. S. Keeping*, 171; Meteorites, *H. B. Collier*, 301; Saturn, *Jean Wallbridge*, 303; Commemoration of the 400th Anniversary of the Death of Copernicus, *L. H. Nichols*, 304.

MONTREAL CENTRE — Life in the Universe, *R. Meldrum Stewart*, 78; Twenty-five Years' Progress in Meteorological Science, *Frederick Mahaffy*, 79; The Universe as seen through the Largest Telescopes (films), 80; The Moon—The Weather—The Solar System—Exploring the Universe (films), 80; Theories of the Universe, *E. Russell Paterson*, 175; The Sun and the Moon, *H. F. Hall*, 176; The Planets, *E. Russell Paterson*, 219; The Nature of the Stars, *H. F. Hall*, 220; The Use of the Observer's Handbook, *F. DeKinder*, 220; Commemoration of the Four Hundredth Anniversary of the Death of Copernicus, *A. Vibert Douglas*, 221; Comets and Meteors, *A. V. Madge*, 256; Where are the Stars? *W. Bruce Ross*, 348; Life on Other Worlds, *D. P. Gillmor*, 349; The Galaxies, *F. P. Morgan*, 350; Astronomical Observations for Amateurs, *DeLisle Garneau*, 351.

OTTAWA CENTRE—Copernicus (1473-1543)—Commemoration Lecture, *A Vibert Douglas*, 223.

QUEBEC CENTRE—Le Test de Foucault et ses Applications, *H. P. Koenig*, 262; Le Télescope du Mont Palomar, *L. Pouliot*, 263.

TORONTO CENTRE—Recent Developments in the Quantum Theory and their Relation to Astronomy, *A. F. C. Stevenson*, 37; Spectroscopy, I-V, *F. Shirley Jones*, 38, 40, 75, 76, 77; Meteorological Instruments of the Twentieth Century, *W. E. Knowles Middleton*, 38; The Solar System, *J. H. Horning*, 75; What's

New about Jupiter, *Ruth J. Northcott,* 76; Isaac Newton—His Three Hundredth Anniversary, *C. A. Chant,* 77; Discovery of Pluto, *Helen S. Hogg,* 127; Astronomy as used in Navigation, *G. D. Frewer,* 128; Eye-Witness Accounts of Destruction by Great Meteors, *Helen S. Hogg,* 172; The Age of the Earth, *John Satterly,* 173; The Galaxy, *D. W. Best,* 259; Giant Reflecting Telescopes, *Helen S. Hogg,* 259; Military Telescopes—How They Are Made and Used, *A. M. Crooker,* 384; Big and Little Stars, *Helen S. Hogg,* 384; "Order is Heaven's First Law," *A. E. Johns,* 386; Pulsating Stars and the Period-Luminosity Relation, *Helen S. Hogg,* 386; The Constitution of the Earth as a Geologist Sees It, *E. S. Moore,* 387; The Rotation of Our Galaxy, *Helen S. Hogg,* 390; Copernicus and His Age, *Oscar Halecki,* 392.

VANCOUVER CENTRE — The Bright Line Stars, *C. S. Beals,* 261; Radio, *R. K. Brown,* 261.

VICTORIA CENTRE—The Size of the Universe, *R. M. Petrie,* 34; Sources of Stellar Energy, *G. M. Volkoff,* 35; The First Inter-American Science Congress, *J. A. Pearce,* 36; The Fundamentals of Spectroscopy, *C. S. Beals,* 298; The Spectro-chemical Analysis of Ores and Minerals, *G. C. Brown-Cave,* 299; The Riddle of the Corona, *William Petrie,* 299; The Constitution of the Stars, *K. O. Wright,* 300.

WINNIPEG CENTRE—The Making of an Amateur Telescope, *D. R. P. Coats,* 33; Mapping the Stars, *L. W. Koser,* 34; Fifty-five Navigation Stars—How to Identify Them, *V. C. Jones,* 174; Radio, *Stewart Mackie,* 257; Aerial Navigation, *M. C. Minton,* 258; Copernicus—His Place among the Scientists of the Last Four Centuries, *Frank Allen,* 347.

Lunar Crater *Conon* and Suggested Work for Amateurs, a Map of the, *Frank Vaughn,* 393.

Lunar Eclipse of February 19-20, 1943, 126.

Lunar Features, The Origin of the, *R. A. McIntosh,* 24.

M

M.W.C. 374, On the Physical Origin of P Cygni-type Absorption Lines in the Spectrum of, *C. S. Beals,* 241.

Madge, A. V., Comets and Meteors, 177; Le Petit Télescope, 143.

Mahaffy, Frederick, Twenty-five Years' Progress in Meteorological Science, 319.

Maltwood, K. E., The Discovery of a Prehistoric Zodiac in England, 269.

Map of the Lunar Crater *Conon* and Suggested Work for Amateurs, A, *Frank Vaughn,* 393.

McArthur, Duncan, (obituary) 343.

McDonald, Jean K., The Occultation of Jupiter on January 13, 1944, (with R. M. Petrie), 398.

McIntosh, R. A., The Origin of the Lunar Features, 24; The Velocities of Meteors, 305.

McKellar, A., Spectrographic Orbital Elements and Relative Luminosities of the Components of H.D. 203858, (with C. G. Patten), 205.

McKie, Douglas, Newton and Chemistry, 17.

McLaughlin, Dean B., The American Astronomical Society, 416.

Meteoric Iron in Ancient Egypt, 127.

Meteorological Science, Twenty-five Years' Progress in, *Frederick Mahaffy,* 319.

Meteors, Comets and, *A. V. Madge,* 177.

Meteors on the Moon, 216.

Meteors, The Velocities of, *R. A. McIntosh,* 305.

Microscope and Barometer as a Point of Departure for the Natural Sciences, Telescope, *Louis C. Karpinski,* 401.

Miroir parabolique de 40 cm, d'-Ouverture, Examen d'un, *Paul H. Nadeau,* 237.

Montreal Centre—Recording the Perseids, Evening of August 11-12, 429.

Moon Clears the Horizon, A Newish, 125.

Moon, Meteors on the, 216.
Morgan, F. P., Observations of Venus in 1943, 353.
Mysterious "Planet" in the System of 61 Cygni, The, 73.

N

Nadeau, Paul H., Examen d'un Miroir parabolique de 40 cm. d'Ouverture, 237.
Newton after Three Centuries, 41.
Newton and Chemistry, *Douglas McKie*, 17.
Newton, Halley, Galileo: the Men Themselves, *M. A. Evershed*, 47.
Newton, Isaac: Born Three Hundred Years Ago, *C. A. Chant*, 1.
Newton Tercentenary, Celebration of the, 124.
Newton Tercentenary Celebrations, 29.
Newton's Reflecting Telescope, 32.
Night Fall: Luxor, (poem), *R. R. Thompson*, 355.
Northcott, Ruth J., The Atmosphere of Jupiter, 52; The Orbits of the Spectroscopic Binary H.D. 93075, 339; (see also Notes and Queries).
Notes and Queries, 29, 73, 124, 167, 216, 254, 294, 343, 381, 425.
Nova Herculis (1934) and Kepler's Great Nova (1604), 294.
Nova Puppis 1942, 31.

O

Obituaries: Chant, Mrs. C. A., 346; McArthur, Duncan, 343; Schlesinger, Frank, 343.
Observations of Venus, 1938-42, and their Interpretation, *W. H. Haas and H. M. Johnson*, 146, 193.
Observations of Venus in 1943, *F. P. Morgan*, 353.
Observatory and Equipment for Sale, 296.
Occultation of Jupiter on January 13, 1944, The, *R. M. Petrie and Jean K. McDonald*, 398.
On Revolution and Rotation, *H. M. Johnson*, 419.
On the Physical Origin of P Cygni-type Absorption Lines in the Spectrum of M.W.C. 374, *C. C. Beals*, 214.
Orbits of the Spectroscopic Binary H.D. 93075, The, *Ruth J. Northcott*, 339.
"Order is Heaven's First Law," *A. E. Johns*, 225.
Origin of the Lunar Features, The, *R. A. McIntosh*, 24.
Ottawa Junior Astronomical Club, 1942-43, 430.
Our Earthly Flight, (poem), *W. Carl Rufus*, 192.

P

Parody on "Twinkle, Twinkle!" 294, 345, 425.
Patten, C. G., Spectrographic Orbital Elements and Relative Luminosities of the Components of H.D. 203858, (with A. McKellar), 205.
Perseids, Evening of August 11-12, Recording the, 429.
Perseid Meteors, 1943, Observation of the, 296.
Petrie, R. M., The Composite Binary System H.D. 144208-9, 277; The Occultation of Jupiter on January 13, 1944 (with Jean K. McDonald), 398.
"Planet" in the System of 61 Cygni, The Mysterious, 73.
Planetarium (poem), *Mary Brent Whiteside*, 345.
Plaskett, Dr. J. S., Memorial to, 167.
Pluto—its Mass, Diameter, Density, 125.
Predictions which were not Fulfilled, 216.

Q

Quotations, Sources of Two, 218.

R

Rainbows—Half a Dozen of Them, 255.
Rayons cosmiques, Les, Florian Crète (with J.-E. Guimont), 333.
Recent Progress in Astronomy, *Frank S. Hogg*, 81.
Reflector Tube, Air Currents within the, *E. K. White*, 377.
Reflectors? How Many Amateur, 73.
Reviews of Publications:
Astronomical Society of the Pacific, Leaflets, Vol. III, *C.A.C.*, 293.
Goldberg, Leo, and Lawrence H. Aller, Atoms, Stars and Nebulae, *C.A.C.*, 379.

Humphreys, W. J., Ways of the Weather, *C.A.C.*, 165.
Lamb, S. G., Air Navigation for Beginners, *F.S.H.*, 292.
Rossby, C.-G. and others, Boundary-layer Problems in the Atmosphere and Ocean, *C.A.C.*, 253.
Spitz, Armand, A Start in Meteorology, *F.S.H.*, 292.
Waterfield, R. L., The Revolving Heavens, *F.S.H.*, 166.
Revolution and Rotation, On, *H. M. Johnson*, 419.
Rosebrugh, D. W., Thirty-second Annual Meeting of the A.A.V.S.O., 421.
Rotation, On Revolution and, *H. M. Johnson*, 419.
Royal Astronomical Society of Canada, Annual Meeting, 100; Binding of Volumes of the Journal for Members, 168, 297; Elected Members at Large, 123; The Third Annual Award of the Chant Medal, 97.
Rufus, W. Carl, Copernicus, Polish Astronomer, 1473-1543, 129; Our Earthly Flight (poem), 192.

S

Schlesinger, Frank (obituary), 343.
Setting up and Adjusting the Equatorial Reflecting Telescope, *H. Boyd Brydon*, 57, 153.
Singing Sands in the Gobi Desert, 295.
Soanes, Sidney V., Kirkwood's Gaps in the Asteroid Orbits (with John J. DelGrande), 187.
Sources of Two Quotations, 218.
Spectrographic Orbital Elements and Relative Luminosities of the Components of H.D. 203858, *C. G. Patten and A. McKellar*, 205.
Spectroscopic Binary H.D. 93075, The Orbits of the, *Ruth J. Northcott*, 339.
Stanford, F. T. (see Notes and Queries).
"Swish" of the Aurora, 168, 254.

T

Telescope and the University of Alberta Observatory, The Wates, *J. W. Campbell*, 265.
Télescope, Le Petit, *A.-V. Madge*, 143.
Telescope, Microscope and Barometer as a Point of Departure for the Natural Sciences, *Louis C. Karpinski*, 401.
Telescope, Newton's Reflecting, 32.
Telescope, Setting up and Adjusting the Equatorial Reflecting Telescope, *H. Boyd Brydon*, 57, 153.
Thompson, R. R., Night Fall: Luxor (poem), 355.
Twenty-five Years' Progress in Meterological Science, *Frederick Mahaffy*, 319.
"Twinkle, Twinkle!", Parody on, 294, 345, 425.

U

University of Alberta Observatory, The Wates Telescope and the, *J. W. Campbell*, 265.

V

Vaughn, Frank, A Map of the Lunar Crater *Conon* and Suggested Work for Amateurs, 393.
Velocities of Meteors, The, *R. A. McIntosh*, 305.
Venus, 1938-42, Observations of, and their Interpretation, *W. H. Haas and H. M. Johnson*, 146, 193.
Venus in 1943, Observations of, *F. P. Morgan*, 353.
Victoria Summer Course in Astronomy, 392.
Ville Marie Observatory in 1942, The, *De Lisle Garneau*, 162.

W

Wates Telescope and the University of Alberta Observatory, The, J. W. *Campbell*, 265.
White, E. K., Air Currents within the Reflector Tube, 377.
Whiteside, Mary Brent, Planetarium (poem), 345.

Z

Zodiac in England, The Discovery of a Prehistoric, *K. E. Maltwood*, 269.